

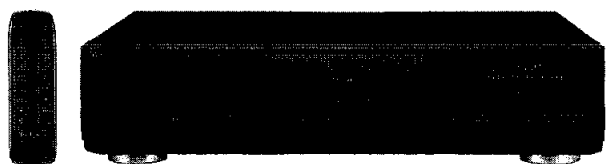
Compact Disc Player

SL-PG590

SL-PG490

SL-PG390

Operating Instructions



The photograph shows model SL-PG590.

COMPACT
disc
DIGITAL AUDIO



E **EB** **EP**

Technics®

Note:

The "EB" indication shown on the packing case indicates United Kingdom.
Before connecting, operating or adjusting this product, please read these instructions completely.
Please save this manual.

RQT4196-B

Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.

These operating instructions are applicable to the SL-PG590, SL-PG490 and SL-PG390 models.
These operating instructions, however, fundamentally explain the operation of SL-PG590 model.

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Supplied accessories



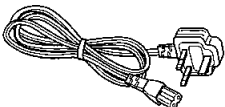
Please check and identify the supplied accessories.

☒

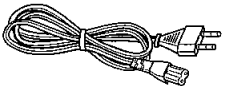
AC power supply cord

1 pc.

For United Kingdom (RJA0044-C)



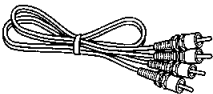
For areas except United Kingdom (RJA0043-C)



☐

Stereo connection cable (SJP2249-3)

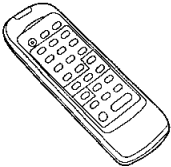
1 pc.



☐

SL-PG590 SL-PG490 Remote control (EUR643900)

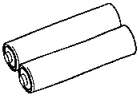
1 pc.



☐

SL-PG590 SL-PG490 Batteries for remote control (UM-4, AAA, R03) ...

2 pcs.



Use numbers indicated in parentheses when asking for replacement parts.

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

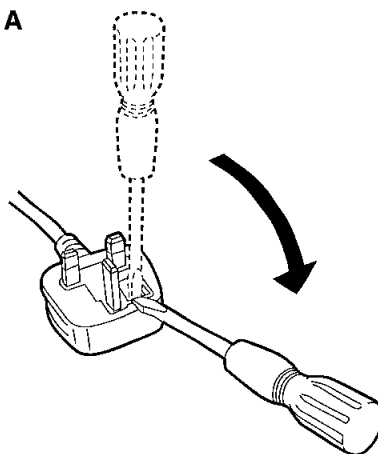
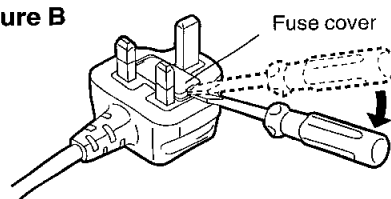


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

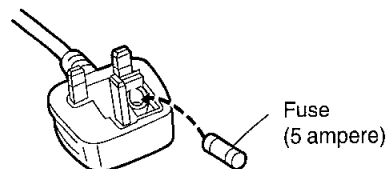
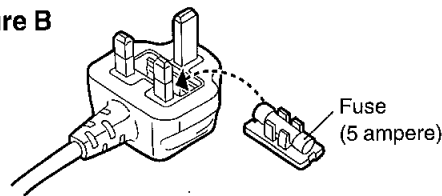


Figure B



Placement

Avoid placing the unit in areas of:

- direct sunlight
- high temperature
- high humidity
- excessive vibration
- uneven surfaces (Place the unit on a flat level surface.)

Such conditions might damage the cabinet and/or other component parts and thereby shorten the unit's service life.

To protect the unit against sound distortion and accoustical effects, please place the unit at least 15 cm away from wall surfaces etc.

Stacking

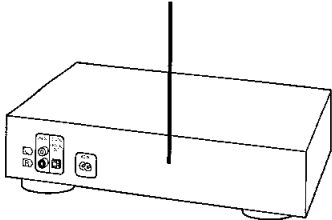
Never place heavy items on top of the unit or the AC power cord.

Voltage

- It is very dangerous to use an AC power source of high voltage such as for an air conditioner.
A fire might be caused by such a connection.
- A DC power source can not be used.
Be sure to check the power source carefully, especially if on a ship or other place where DC is used.

Power cord protection

- Avoid cuts, scratches or poor connection of the AC power cord, as this may result in fire or electric shock.
Excessive bending, pulling or slicing of the cord should also be avoided.
- Do not pull on the cord when you are disconnecting the power, as this could cause an electric shock. Grasp the plug firmly when you disconnect the power supply.
- Never touch the plug with wet hands or a serious electric shock could result.



(Back of product)

DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅPNING. UNNGÅ DIREKTE EKSPONERING FOR STRÅLING.
VARO!	AVATTIÄSSÄ JA SUOJALUKITUS OHITETI JÄÄSSÄ OLET ALTHANA HÄIKYMÄTÖNTÄ LASERSÄTEILYLLÄ. ÄLÄ KATSO SÄTEESEEN.
WARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH/SPÄRREN ÄR LÖSKOPPLAD. BETRÄKTA EJ STRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNEES OG SIKKERHEDSLÅS BRØYES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSIICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

(Inside of product)
(Indersiden at apparatet)
(Tuotteen sisällä)
(Apparatens insida)
(Produktets innsida)
(Im Inneren des Gerätes)

Foreign materials

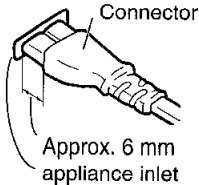
- Ensure that no foreign objects, such as needles, coins, screwdrivers etc., accidentally fall into the unit.
Otherwise, a serious electric shock or malfunction could occur.
- Be extremely careful about spilling water or liquid on/into the unit, as a fire or electric shock could occur.
(Disconnect the power plug and contact your dealer immediately if this occurs.)
- Avoid spraying insecticides onto the unit as they contain flammable gases which can be ignited.
- Insecticides, alcohol, paint thinner and similar chemicals should never be used to clean the unit as they can cause flaking or cloudiness to the cabinet finish.

Service

- Never attempt to repair, disassemble or reconstruct the unit if there seems to be a problem.
A serious electric shock could result if you ignore this precautionary measure.
- If a problem occurs during operation (the sound is interrupted, indicators fail to light up, smoke is detected, etc.) contact your dealer or Authorized Service Center immediately.
- Disconnect the power supply if the unit will not be used for a long time. Otherwise the operation life could be shortened.

AC Power supply cord

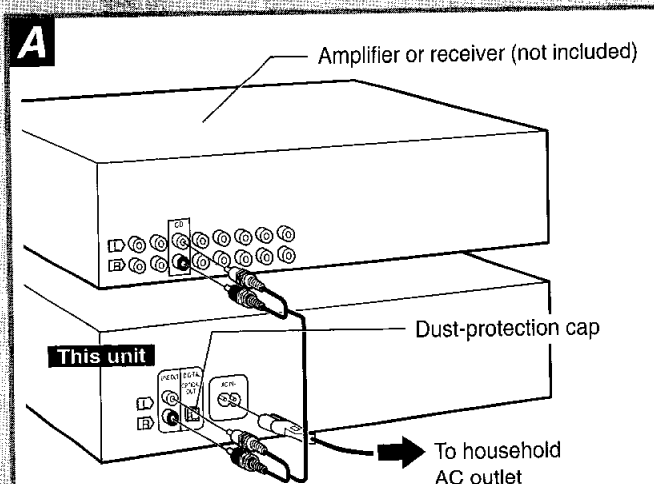
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.
However there is no problem using the unit.



CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

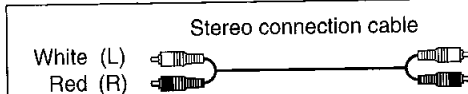
CAUTION!
DO NOT INSTALL OR PLACE THIS UNIT IN A BOOK-CASE, BUILT IN CABINET OR IN ANOTHER CONFINED SPACE IN ORDER TO KEEP WELL VENTILATED CONDITION. ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION CONDITION TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING.

Connections



For United Kingdom:
BE SURE TO READ THE CAUTION FOR THE AC
MAINS LEAD ON PAGE 3 BEFORE CONNECTING.

Before making connections, be sure that the power of this unit and all other system components is first turned off. **A**



Note

Although the figure shows the AC power supply cord being connected to a household AC outlet, if the amplifier (or receiver) is equipped with a AC outlet, connect the cord to that outlet.

To connect a digital amplifier **B**

Note

Remove the dust-protection cap which is inserted in the DIGITAL OPTICAL OUT terminal only if you connect a digital amplifier. When this terminal is not being used, attach the cap as shown in the illustration.

Concerning the remote control

SL-PG590 SL-PG490

Battery installation

Use of batteries

- Do not mix old and new batteries, or batteries of different types (manganese and alkaline, etc.).
- Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.
- If the remote control is not to be used for a long period of time, remove the batteries and store them in a cool, dark place.
- Do not attempt to recharge alkaline or manganese batteries.
- Do not use rechargeable type batteries.

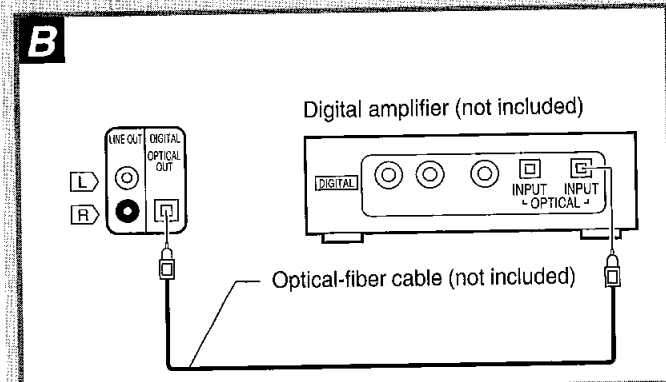
Correct method of use

Operations notes

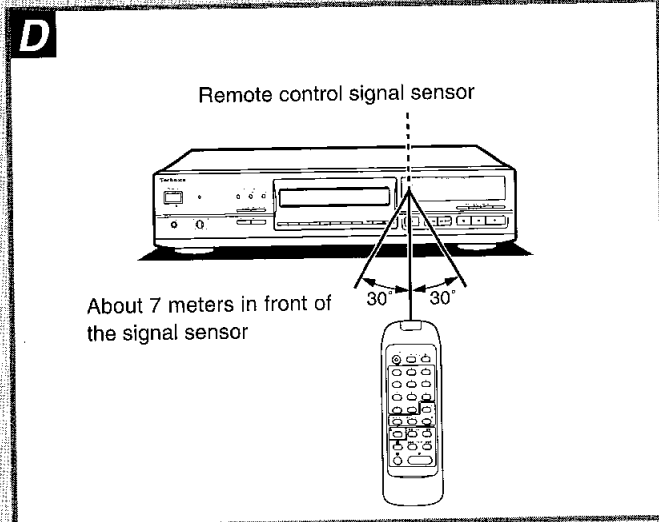
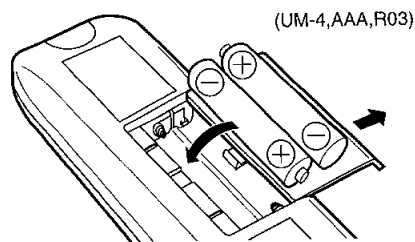
- Do not place obstacles between the remote control signal sensor and remote control unit.
- Do not expose the remote control signal sensor to direct sunlight or to the bright light of an inverter fluorescent light.
- Take care to keep the remote control signal sensor and end of the remote control unit free from dust.
- If this system is installed in a rack with glass doors, the thickness and color of the glass doors might make it necessary to use the remote control a shorter distance from the system.

To prevent damage

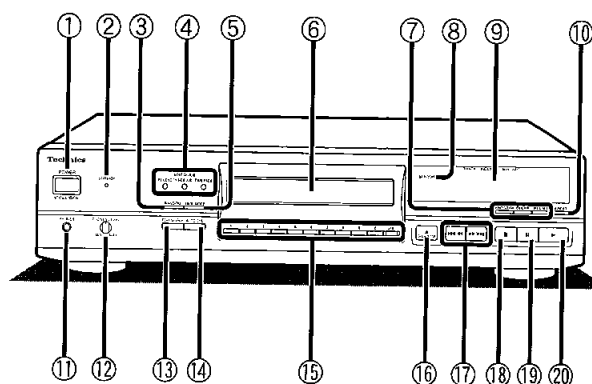
- Do not place heavy items.
- Do not disassemble or reconstruct.
- Do not spill water or other liquids.



C Insert the batteries in the correct polarities (⊕, ⊖).



A

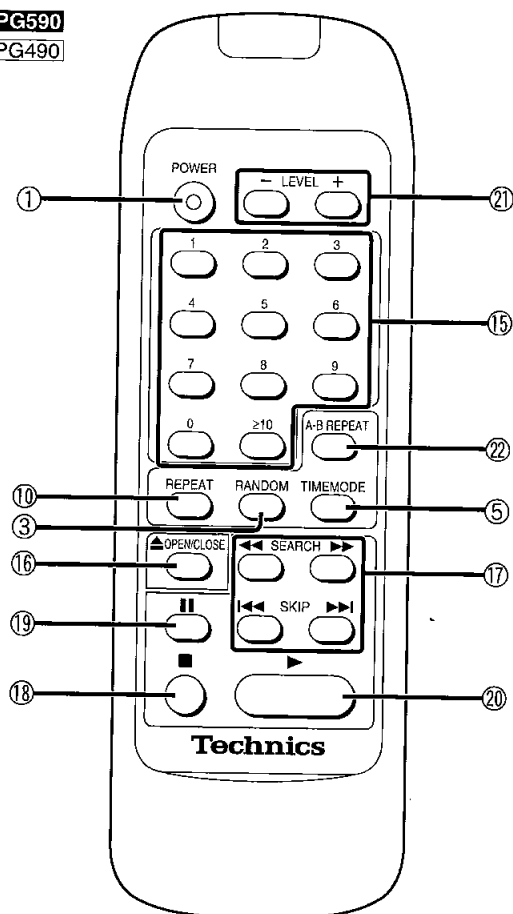


SL-PG590

B

SL-PG590

SL-PG490



Main unit A

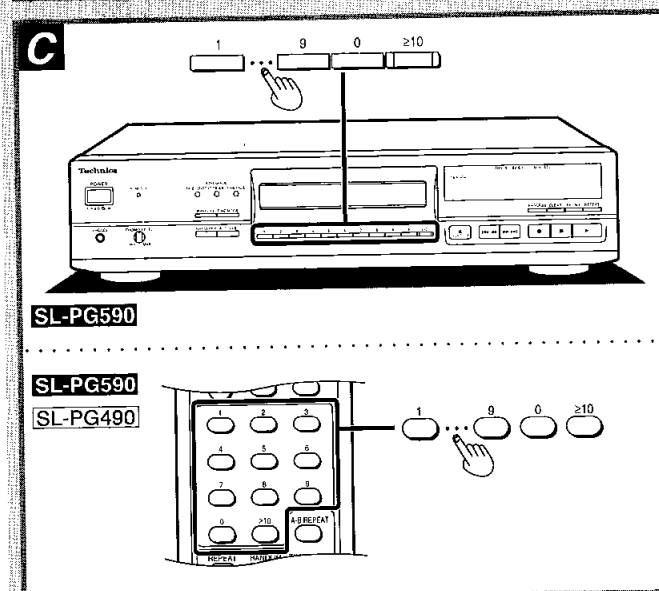
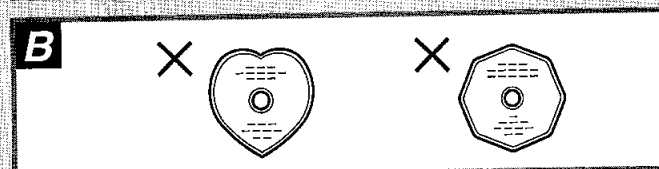
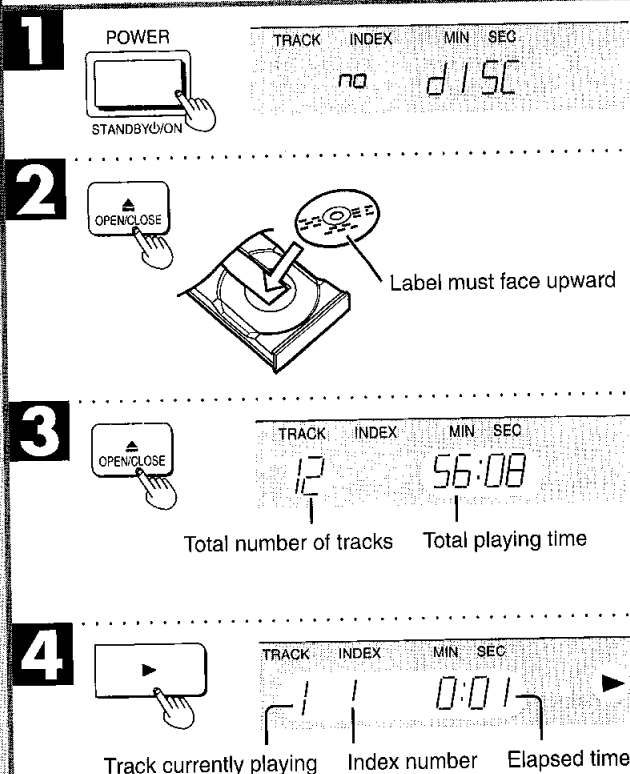
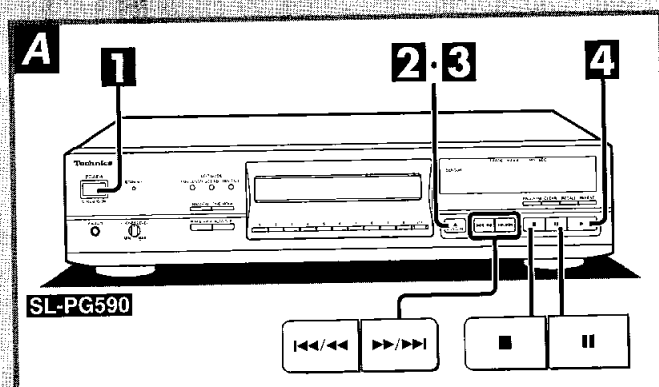
- ① **Power "STANDBY $\odot$ /ON" switch (POWER, STANDBY $\odot$ /ON)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ② **Standby indicator (STANDBY)**
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
- ③ **Random play button (RANDOM)**
- ④ **SL-PG590**
CD edit record buttons (EDIT GUIDE)
 - Tape length button (TAPE LENGTH)
 - Tape side select button (SIDE A/B)
 - Time fade button (TIME FADE)
- ⑤ **Time mode select button (TIME MODE)**
- ⑥ **Disc tray**
- ⑦ **Program play buttons**
 - Program button (PROGRAM)
 - Clear button (CLEAR)
 - Recall button (RECALL)
- ⑧ **Remote control signal sensor (SENSOR)**
There is no "SENSOR" indication on SL-PG390. SL-PG390 can be operated by using the remote control provided with a Technics amplifier or receiver.
- ⑨ **Display panel**
- ⑩ **Repeat button (REPEAT)**
- ⑪ **SL-PG590 SL-PG490**
Headphones jack (PHONES)
- ⑫ **SL-PG590 SL-PG490**
Headphones volume control (PHONES LEVEL)
- ⑬ **Peak search button (PEAK SEARCH)**
- ⑭ **Auto cue button (AUTO CUE)**
- ⑮ **SL-PG590**
Numeric buttons (1-9, 0, ≥ 10)
- ⑯ **Disc tray open/close button ($\blacktriangle$ OPEN/CLOSE)**
- ⑰ **Skip/search buttons ($\blacktriangleleft/\blacktriangleleft, \blacktriangleright/\blacktriangleright$)**
- ⑱ **Stop button ($\blacksquare$)**
- ⑲ **Pause button ($\parallel$)**
- ⑳ **Play button ($\blacktriangleright$)**

Remote control B

SL-PG590 SL-PG490

Buttons ①, ③, ⑤, ⑩, and ⑮ - ⑳ have the same functions as the corresponding buttons on the main unit.

- ㉑ **Level control ($-$ LEVEL $+$)**
- ㉒ **A-B repeat button (A-B REPEAT)**



1 Press POWER (Power goes on).

- "no DISC" indicates that a CD has not been inserted.
- If a CD is already in the disc tray, it automatically begins playing from the first track.

2 Press Δ OPEN/CLOSE to open the tray and insert a disc.

3 Press Δ OPEN/CLOSE to close the tray.

4 Press $\blacktriangleright$ (Play begins).

Play stops automatically after all tracks have been played.

To stop the disc play

Press $\blacksquare$.

To pause	Press $\parallel$ during playback. To resume playback, press $\blacktriangleright$.
To search forward/backward (SEARCH)	Hold down $\blacktriangleleft/\blacktriangleleft$ (backward) or $\blacktriangleright/\blacktriangleright$ (forward) during playback.
To skip forward/backward (SKIP)	Press $\blacktriangleleft/\blacktriangleleft$ (backward) or $\blacktriangleright/\blacktriangleright$ (forward) during playback.

For your reference

- If you skip step 3 and press $\blacktriangleright$, the tray automatically closes and play begins from the first track.

SL-PG590

- When you use the timer with another unit, be sure to turn this unit on.
- When there are 17 or more tracks on the CD, " $\blacktriangleright$ " will appear.

Notes

- Do not use irregular shape CDs (heart-shape, octagonal, etc.). **B**
- During random play (see page 9):
You cannot skip backward to previous tracks.
You can search only in the current track.
- During program play (see page 8):
Forward and backward skipping is performed in the programmed track order.
You can search only in the current track.
- During A-B repeat (see page 10):
Searching can be performed beyond the A-B segment. (A-B repeat will not be cancelled.)

Direct access play SL-PG590 SL-PG490 C

With this function, a disc is played from a desired track to the last track and then stops automatically.
On model SL-PG490 Direct access play is available only on the remote control.

Press the numeric buttons.

Play will begin from the selected track number.

To select a two-digit track

Press ≥ 10 and then the two numbers you want within 7 seconds.

For example

Track No. 25: $\geq 10 \rightarrow 2 \rightarrow 5$

Track No. 30: $\geq 10 \rightarrow 3 \rightarrow 0$

Program play

With this function, you can program up to 20 tracks in any order you like.

1 While the disc is stopped:

Press PROGRAM.

If the button is pressed while the disc is playing, that track is programmed as the first.

2 Select the track to be programmed.

SL-PG590

Press the numeric buttons to specify the track numbers in order.

SL-PG490 SL-PG390

① Press ◀◀/▶▶ or ▶▶/▶▶ to specify the track number.

② Press PROGRAM.

③ Repeat steps ① and ② until you have completed the entry.

If you make a mistake when pressing a track number, press CLEAR.

3 Press ▶.

Tracks are played in the programmed order, and then play stops automatically.

Program contents are stored even after playback ends.

To play the same program contents again, press ▶.

To cancel program mode

Press PROGRAM.

SL-PG590 SL-PG490 A

Selection of tracks (step 2) can be done on the remote control.

Press the numeric buttons to specify the track numbers in order.

To select a two-digit track

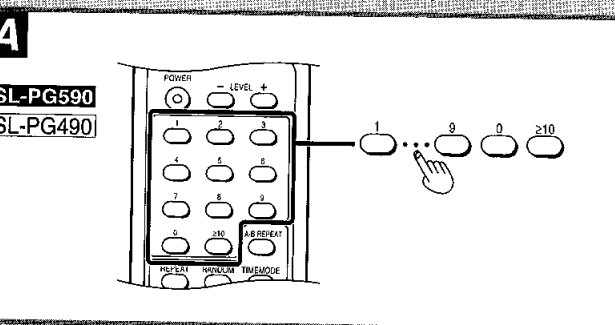
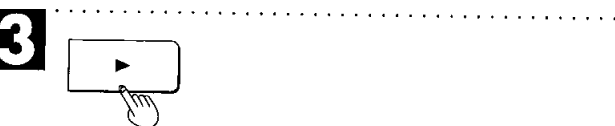
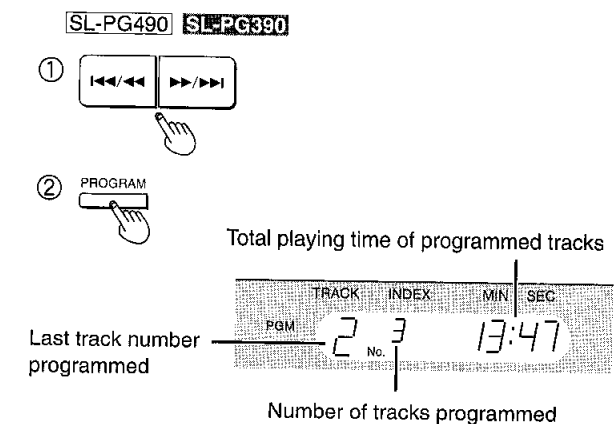
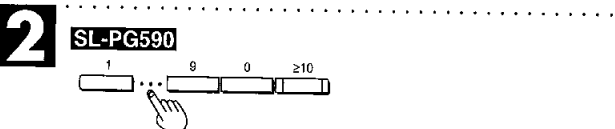
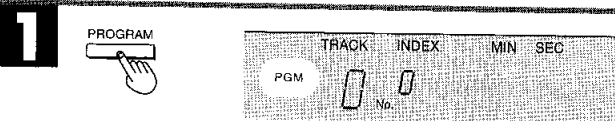
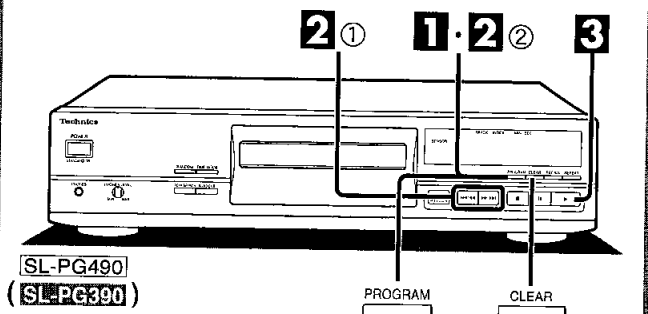
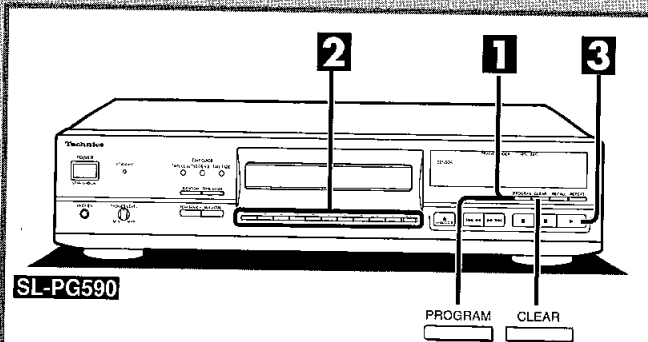
Press ≥10 and then the two numbers you want within 7 seconds.

For example

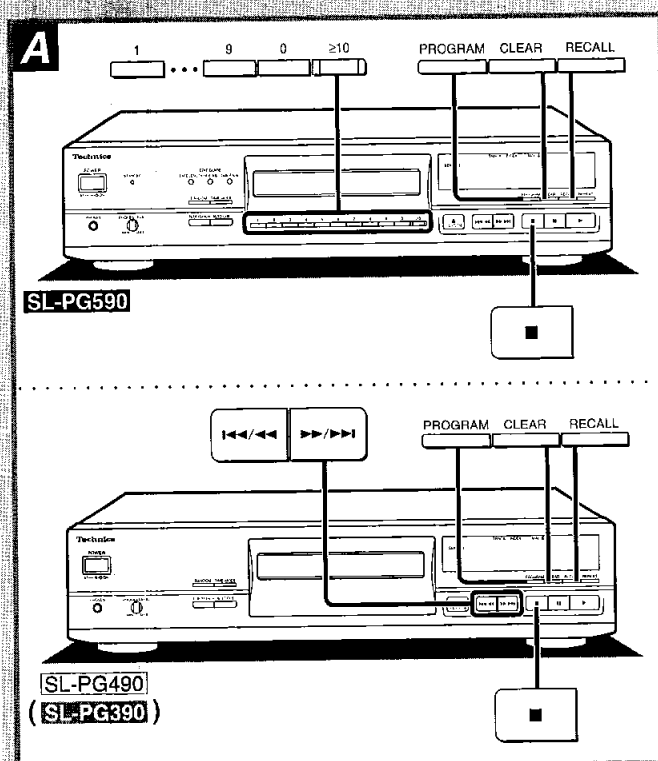
Track no. 25: ≥10 → 2 → 5

Track no. 30: ≥10 → 3 → 0

(Continued on next page)



Program play



Checking program contents

Press RECALL.

Each time the button is pressed, a track number and sequence number are displayed.

To program additional tracks

SL-PG590

Press the numeric buttons.

SL-PG490 SL-PG390

While the disc is stopped:

Press  or  and then press PROGRAM.

To erase programmed tracks

- To erase the last programmed track

While the disc is stopped:

Press CLEAR.

One track is erased each time the button is pressed.

- To erase a track within the program

Press RECALL to display the track to be erased, and then press CLEAR to erase the displayed track.

- To erase all tracks

While the disc is stopped:

Press .

Program mode is also switched off.

For your reference

"-F" appears on the display:

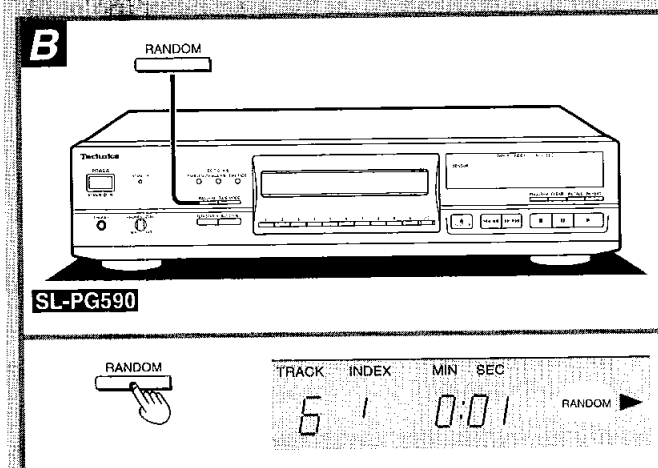
When 21 tracks have been specified (no further programming possible).

"--:--" appears on the display:

- When the total playing time of the programmed tracks exceeds 99 minutes and 59 seconds.

- When a track numbered 21 or higher has been specified.

In these instances, the total playing time will not be displayed, but up to 20 tracks can still be programmed.



Random play

With this function, all tracks on a disc are played one time each in random order, and then play stops automatically.

Press RANDOM.

Random play is cancelled when play is stopped.

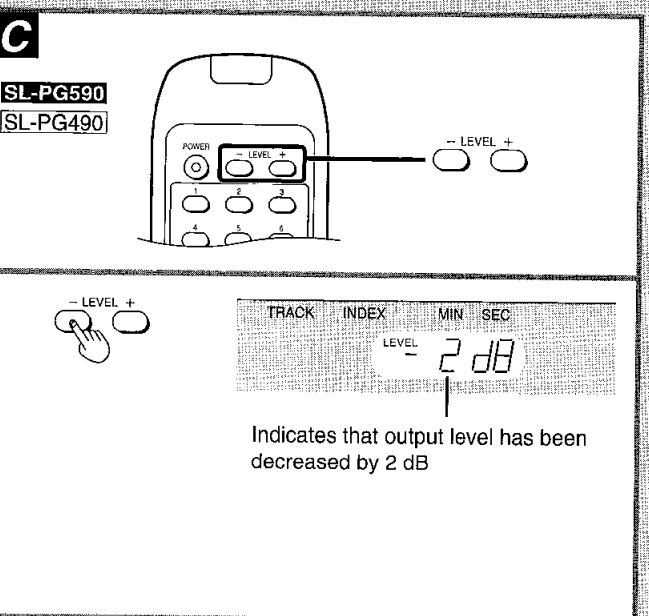
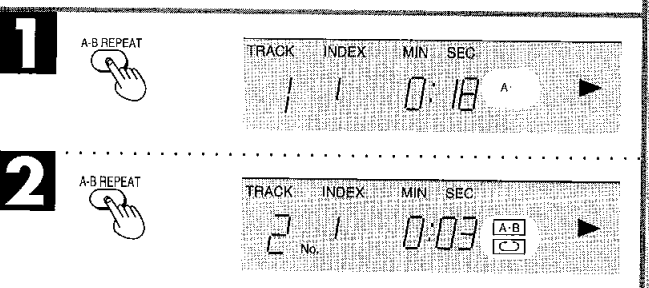
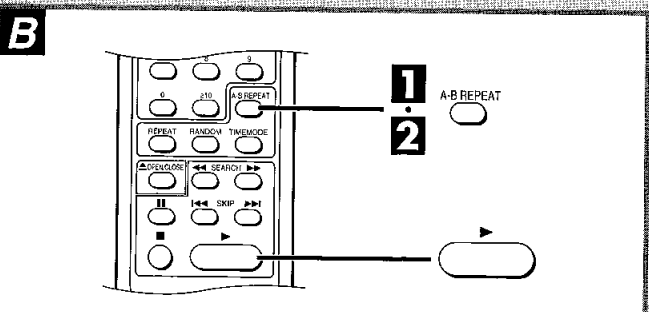
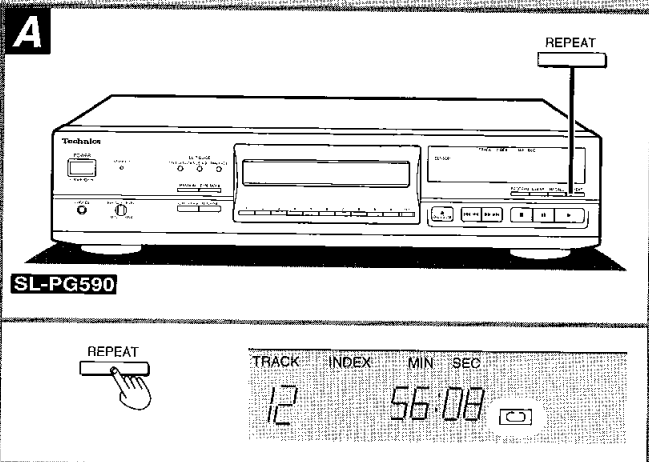
To cancel random play

Press RANDOM.

For your reference

During program play:

The programmed tracks will be played in random order.



Repeat

Playback of all tracks or desired tracks will be repeated.

Press REPEAT before or during play.

To cancel repeat

Press REPEAT.

To repeat only one track or specific tracks

- Specify the track numbers.
Perform steps 1 and 2 on page 8.
- Press REPEAT.
- Press ►.

A-B repeat

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(Available only from the remote control)

While a disc is playing, if you specify a start point (point A) and an end point (point B), that segment will be repeated.

1 While the disc is playing:
Press A-B REPEAT at the start point (point A).

2 Press A-B REPEAT at the end point (point B).
The segment between A and B is played repeatedly.

To cancel A-B repeat

Press A-B REPEAT.

For your reference

- A-B repeat is not possible during random play (see page 9) and program play (see page 8).
- If you press ► during A-B repeat, playback returns to point A.
- If you only specify point A, playback will still return to point A if you press ► at any point.

Output level control

SL-PG590 SL-PG490

(Available only from the remote control)

Rather than adjusting the volume of the amplifier, you can temporarily lower the sound by decreasing the output of the CD player.

Press - LEVEL to decrease the volume.

Each time the button is pressed, the volume changes as follows.

0dB → -2dB → -4dB ... → -12dB

To increase the output after it has been decreased

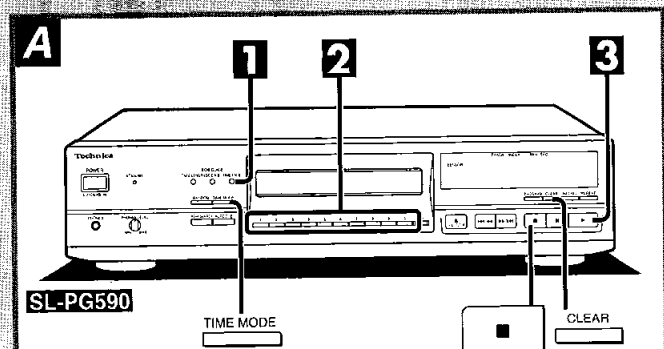
Press LEVEL +.

Note SL-PG590

During CD edit recording (see pages 13 and 14), in order to maintain a constant recording level, the output level cannot be adjusted.

For your reference

- If the unit is turned off and then turned on again, the output level returns to 0 dB (normal sound level).
- When the output level is decreased, the headphone volume decreases as well.



Time fade

SL-PG590

With this function you specify a time, and when that time is reached, the volume is gradually decreased and playback ends.

1 While the disc is stopped or paused:
Press **TIME FADE**.

2 Press the numeric buttons to specify the playback time.

(5 seconds through 99 minutes and 59 seconds)

For example, to play a disc for 25 minutes and 30 seconds and then stop: 2 → 5 → 3 → 0

If you make a mistake while specifying the time, press **CLEAR** and specify it again.

3 Press **▶**.

Five seconds before the specified time "T.FADE" flashes, the volume is gradually decreased, and the disc is paused. Time fade is canceled simultaneously.

To cancel time fade

Press **■**.

To check the time remaining until fade out

Press **TIME MODE** three times during playback.

Note

This function may not work properly if the disc is scratched or soiled.

Time mode selection

While the disc is playing or paused:

Press **TIME MODE**.

Each time the button is pressed, the display changes in the order shown in the illustration.

If playback is stopped and then started again, the display returns to its original state.

For your reference

The following exceptions exist:

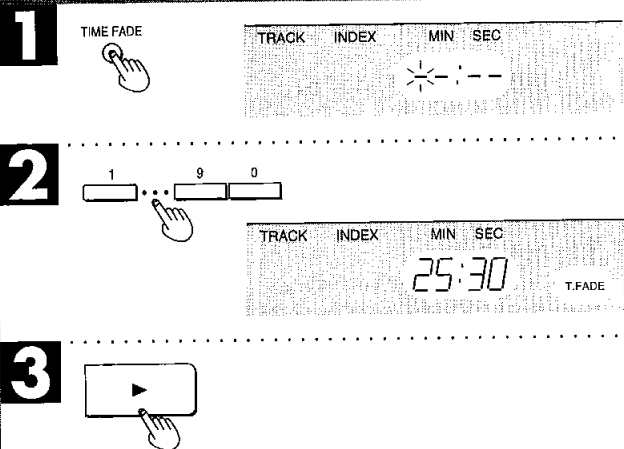
- **During playback of tracks numbered above 20;**
Display ③ appears as "----".
- **During program play;**
Time for programmed tracks appears for displays ② and ④.
- **During random play;**
Display ② appears as "----", and display ④ as "----".

SL-PG590

- **During CD edit recording** (see pages 13 and 14);
Display ② shows the time remaining on the side of the tape being recorded on.

- **During time fade;**

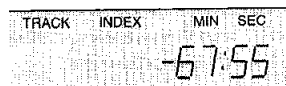
The time remaining until fade out is displayed between displays ③ and ④.



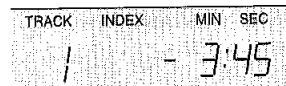
① (Original state)
Elapsed time of track being played



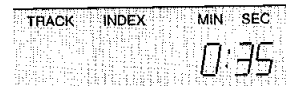
② Time remaining on disc

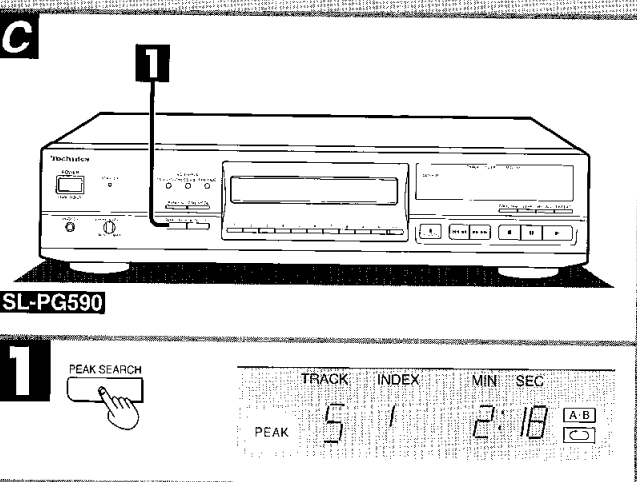
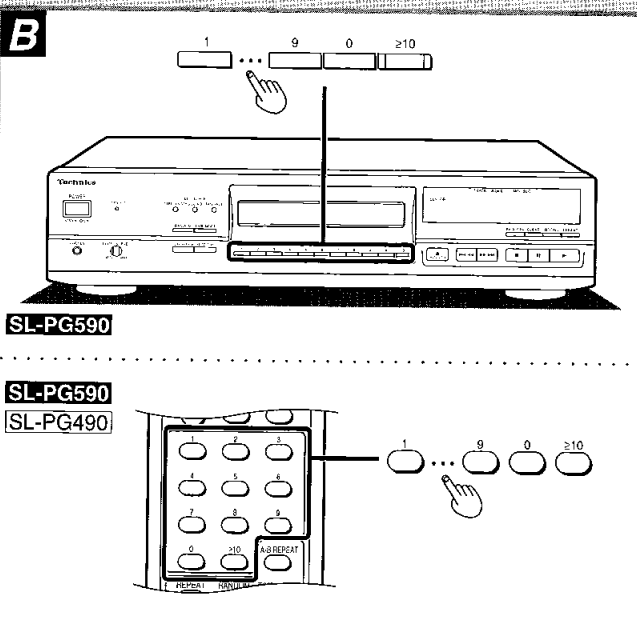
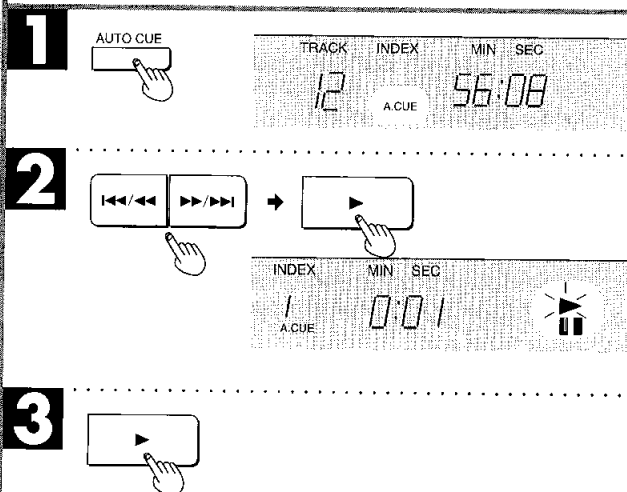
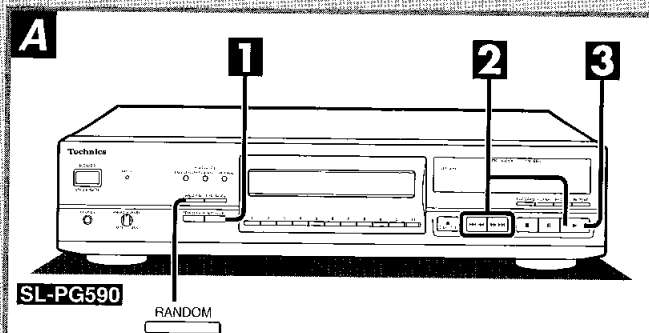


③ Time remaining on track being played



④ Elapsed time of entire disc





Auto cue

With this function, playback is paused at the beginning (where sound can be heard) of all tracks, one track at a time.

1 Press AUTO CUE.

If the disc was playing, playback is paused at the beginning of the next track.

2 Press ◀◀/▶▶ or ▶▶/▶▶ to select the track number and then press ▶.

The unit switches to the play standby mode.

SL-PG590 SL-PG490 **B**

To select the track number with the numeric buttons.

Press the numeric buttons.

The unit immediately switches to the play standby mode.

3 Press ▶.

Sound can be heard immediately.

To play tracks successively, press ▶ for each track.

To cancel auto cue

While the disc is playing:

Press AUTO CUE.

In combination with program play

Instead of step 2 above, program tracks following steps 1 and 2 on page 8 and then press ▶.

In combination with random play

Instead of step 2 above, press RANDOM.

Note

This function may not work properly on tracks which have soft sounds at the beginning, or on tracks which have large amounts of noise, etc.

Peak search

This function searches for the peak level on the disc.

This is convenient when adjusting the recording level on the cassette deck.

1 Press PEAK SEARCH.

The search for the peak level is started.

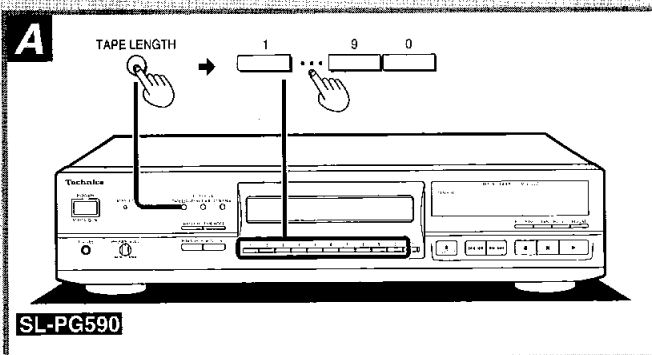
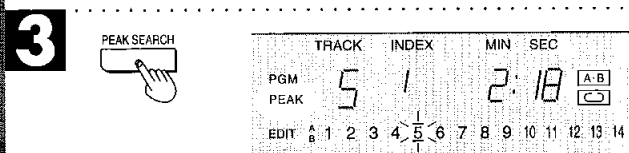
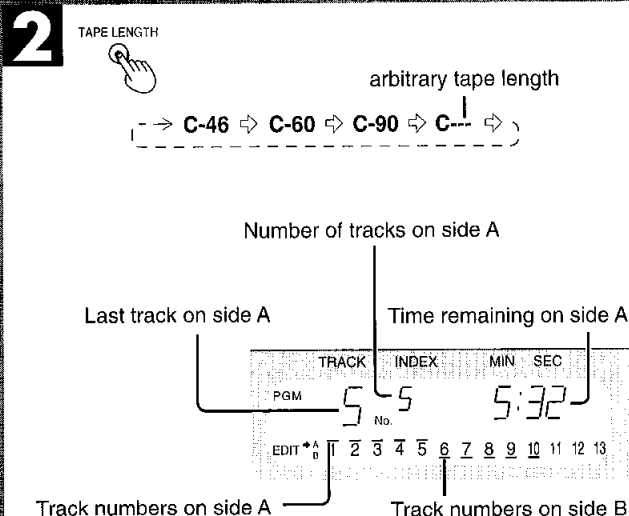
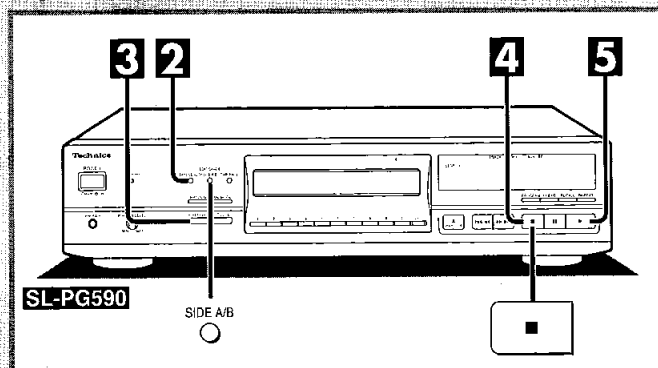
Searching for the peak level takes about 2 minutes and 30 seconds for a 60 minute CD. When the peak level is found, the unit repeatedly produces an approximately 6 second segment around the peak level.

2 Adjust the recording level on the cassette deck.

Refer to the operating instructions of your cassette deck for details on this procedure.

For your reference

Since multiple peaks exist on compact discs, even for the same disc a different peak level may be found each time a peak search is performed on a disk.



CD edit recording is a function which allows you to specify a tape length and then automatically performs editing such that no tracks get cut off at the end of the tape. With this function, an interval is automatically added between tracks if an interval doesn't already exist. This is so tape search functions that use 4 second intervals to find the beginnings of tracks will work correctly. (auto space function)

1 Prepare the cassette deck.

1. Wind the leader tape and insert the tape.
2. Select noise reduction.
3. (Double-side playback decks only)
Set the reverse mode to single side playback ($\rightleftarrows$), and set the running direction of the tape to $\blacktriangleright$.
4. Set the cassette deck to recording standby mode.
(For details, refer to the operating instructions for the cassette deck.)

2 Press TAPE LENGTH to specify the tape length.

This function divides the tracks on a disc between the two sides of a tape. Each time the button is pressed, the tape length changes as illustrated.

- To select an arbitrary recording length, see below.
- To add tracks in the extra space on the tape, see page 14.
- To check the edit contents for side B or make changes, press SIDE A/B.

3 Press PEAK SEARCH to search for the peak level on the disc, and adjust the recording level on the cassette deck.

(see page 12)

4 Press ■.

5 Press $\blacktriangleright$ at the same time you begin recording on the cassette deck.

•When the tracks allotted to side A have been recorded:

The CD player pauses at the beginning of the first track on side B. The cassette deck continues to record to the end of side A and then stops automatically.

•To record side B:

1. Remove the tape to wind the leader.
2. (For a double-side playback deck)
Re-insert the tape and set the running direction to $\blacktriangleleft$.
(For a single-side playback deck)
Turn the tape around and re-insert it.
3. Press $\blacktriangleright$ at the same time you begin recording on the cassette deck.

To cancel CD edit mode

Press ■.

To select an arbitrary recording length $\blacksquare$

Press TAPE LENGTH to select "C---" and enter the total time for both sides of the tape (1 to 99 minutes).

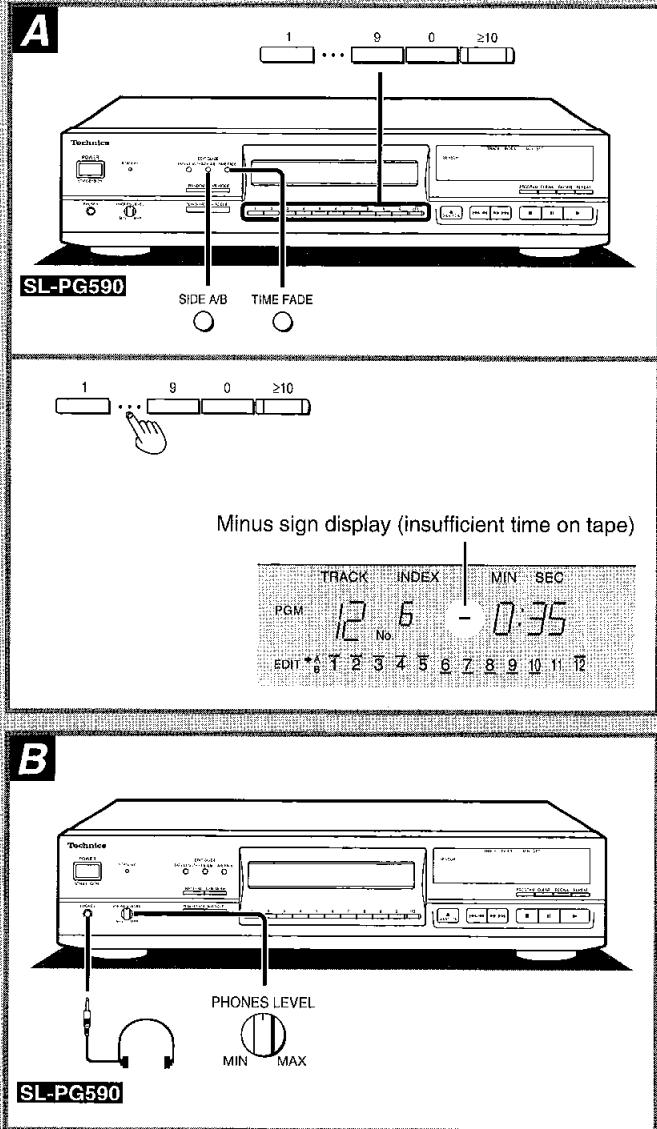
For example

To select 30 minutes: 3 $\rightarrow$ 0

To select 5 minutes: 0 $\rightarrow$ 5

If you make a mistake when entering this value, select "C---" again.

(Continued on next page)



To add tracks in the extra space on the tape **A**

After step 2 on page 13, press the numeric buttons to specify the track number.
(See page 8.)

When a minus sign appears on the display, it indicates that the time remaining on the tape is insufficient.

To fade out at the end of the tape when the minus sign is displayed
Press TIME FADE.

At the end of the tape the sound will gradually decrease and recording will end.

If you want to fade out at the end of side B, press SIDE A/B, then repeat the same procedure described as above.

Note
Editing cannot be performed on more than 20 tracks or on tracks numbered above 20.
In such instances, don't use the edit recording function, and simply perform recording in the normal playback mode.

To edit record programmed tracks

Program your tracks as in steps 1 and 2 on page 8 and then follow the steps on page 13.

Program tracks so that the total playing time is less than the length of the tape.

To listen with headphones
SL-PG590 SL-PG490 **B**

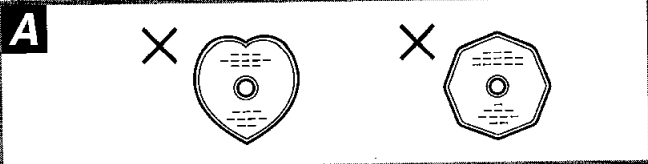
Reduce the volume, and connect the headphones.
Plug type: 3.5 mm stereo

To adjust the headphones volume
Adjust the volume with PHONES LEVEL.

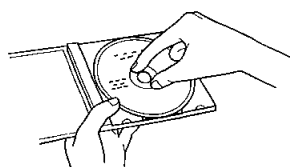
Note
Avoid listening for prolonged periods of time to prevent hearing damage.

Concerning CDs

With this system, you can only play CDs having this mark.
However, do not use irregular shape CDs (heart-shape, octagonal, etc.). CDs of the sort can damage the unit. **A**

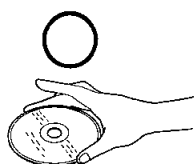


B How to return CDs to their case



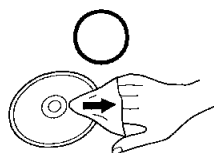
Face label upwards and press downward from above.

C How to hold CDs

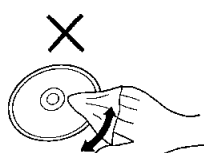


Do not touch the recorded surface.

D How to clean CDs



Wipe from inside outward.



Handling precautions

Be sure to handle CDs according to the precautions shown on the left (**B** – **D**). Failure to do so may damage the CD or the unit.

- If you are taking the CD from a cold to a warm environment, moisture may form on the CD. Wipe this off with a soft, dry, lint-free cloth before using the CD.
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to CDs. (Do not use CDs with exposed adhesive from tape or left over peeled off stickers.)
- Do not use scratch-proof protectors or covers other than those specified for use with this system.

Storage precautions

Be sure to store CDs in their cases to protect them from dust, scratches, and warping.

Do not place or store CDs in the following places

- Locations exposed to direct sunlight
- Humid or dusty locations
- Locations directly exposed to a heat vent or heating appliance
- In the glove compartment or on the rear deck of an automobile

Maintenance

To clean this unit, wipe with a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and-water solution or a weak detergent solution.

- Never use alcohol, paint thinner, benzine, or chemically treated cloths to clean this unit.
- Before using chemically impregnated cloth, read the instructions that came with the cloth carefully.

Troubleshooting guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

Problem	Probable cause(s)	Suggested remedy	Reference page(s)
After inserting a disc, the tray will not close even after pressing ▲ OPEN/CLOSE .	Is the disc inserted properly ?	Re-insert the disc.	7
Even after inserting a disc, the total number of tracks and other indicators do not appear on the display.	Is the disc inserted upside-down ?	Re-insert the disc.	7
	Is the disc dirty ?	Wipe with a soft cloth.	15
	Is the disc scratched ?	Use another disc.	
	Is the disc extremely warped ?		
	Are you using a non-standard disc ?		
Even after pressing ▶ , disc playback does not begin.	Has moisture condensed in the unit ?	Wait an hour before using.	
Specific areas do not play properly.	Is the disc dirty ?	Wipe with a soft cloth.	15
SL-PG590 SL-PG490 The remote control does not work.	Are the batteries inserted with the ⊕ and ⊖ ends reversed ?	Insert with the ⊕ and ⊖ oriented correctly.	5
	Are the batteries worn out ?	Replace batteries.	5

Technical specifications

•Audio

No. of channels	2 (left and right, stereo)
Frequency response	
SL-PG590	2–20,000 Hz, ±0.5 dB
SL-PG490 SL-PG390	2–20,000 Hz, ±1 dB
Output voltage	2 V (at 0 dB)
Dynamic range	
SL-PG590	96 dB
SL-PG490 SL-PG390	92 dB
S/N	100 dB
Harmonic distortion	
SL-PG590	0.0035% (1 kHz, 0 dB)
SL-PG490 SL-PG390	0.005% (1 kHz, 0 dB)
Total harmonic distortion	
SL-PG590	0.004% (1 kHz, 0 dB)
SL-PG490 SL-PG390	0.007% (1 kHz, 0 dB)
Wow and flutter	Below measurable limit
DA converter	MASH (1 bit)
Output impedance	1 kΩ
Load impedance	More than 10 kΩ
Headphone output level	
SL-PG590 SL-PG490	15 mW max. 32 Ω (adjustable)

•Pickup

Wavelength	780 nm
Laser Power	No hazardous radiation is emitted (with safety protection)

•General

Power supply	AC 50 Hz, 230–240 V
Power consumption	13 W
Dimensions (W × H × D)	
SL-PG590	430 × 103 × 283 mm
SL-PG490 SL-PG390	430 × 92 × 283 mm
Weight	
SL-PG590	3.6 kg
SL-PG490	3.2 kg
SL-PG390	3.1 kg

Note

Specifications are subject to change without notice. Weight and dimensions are approximate.

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